CLAIMS

1. (previously amended) A compound of formula E-C_a-R-C_b-A, wherein E is a therapeutic or diagnostic agent, R is a reactive group, C_b and C_a are optional first and second connecting respectively, and A is an affinity group comprising any molecule or part of a molecule possessing specific binding determinants for a target molecule having an affinity for human serum albumin, wherein affinity group A comprises a sequence of amino acid residues -O_1-O_2-X_1-X_2-B in which the amino acid residues are independently selected from the group of all twenty naturally occurring amino acids.

2. (previously amended) A compound according to claim 58, wherein amino acid residue O_1 is selected from the group consisting of phenylalanine, arginine, glutamine, tyrosine, glutamic acid and tryptophan; amino acid residue O_2 is selected from the group consisting of leucine, arginine, glutamic acid, tryptophan and phenylalanine; amino acid residue X_1 is selected from the group consisting of phenylalanine, tryptophan, methionine and tyrosine; amino acid residue X_2 is selected from the group consisting of serine, arginine and glutamic acid; and amino acid residue B is selected from the group consisting of serine, arginine and glutamic acid.

Claim 3 (previously cancelled)

4. (previously amended) A compound according to claim 58, wherein one of the five amino acid residues is an L amino acid residue and the other four amino acid residues are D amino acid residues.

5. (previously amended) A compound according to claim 2, wherein the L-amino acid residue is selected from the group consisting of the amino acid residue O_2, the amino acid residue X_1, and the amino acid residue X_2.

6. (previously amended) A compound according to claim 58, wherein one of the five amino acid residues is a D-amino acid residue and the other four amino acid residues are L-amino acid residues.

7. (original) A compound according to claim 6, wherein the D-amino acid residue is selected from the group consisting of the amino acid residue O_2, amino acid residue X_1, and amino acid residue X_2.

8. (original) A compound according to claim 7, wherein the D-amino acid residue is the amino acid residue O_2.

9. (previously amended) A compound according to claim 58, wherein O_1 is phenylalanine and O_2 is leucine.

10. (previously amended) A compound according to claim 58, wherein O_1 is arginine and O_2 is arginine.

11. (previously amended) A compound according to claim 58, wherein O_1 is glutamine and O_2 is glutamic acid.

12. (previously amended) A compound according to claim 58, wherein O_1 is glutamic acid and O_2 is tryptophan.

13. (previously amended) A compound according to claim 58, wherein O_1 is tryptophan and O_2 is tryptophan.

14. (previously amended) A compound according to claim 58, wherein O_1 is tryptophan and O_2 is glutamic acid.

15. (previously amended) A compound according to claim 58, wherein X_1 is tyrosine.

16. (previously amended) A compound according to claim 58, wherein X_2 is glutamic acid.

17. (previously amended) A compound according to claim 58, wherein B is glutamic acid.

18. (previously amended) A compound according to claim 58, wherein O_1 is phenylalanine, O_2 is D-leucine, X_1 is tyrosine, X_2 is glutamic acid, and B is glutamic acid.

19. (previously amended) A compound according to claim 58, wherein the amino acid residue B is a C-terminal amino acid residue.

20. (original) A compound according to claim 19, wherein the affinity group comprises the amino acid sequence $-O_1-O_2-X_1-X_2-B-NH_2$.

21. (previously amended) A compound according to claim 58, wherein the the reactive group comprises a functional group selected from the group consisting of carboxy, phosphoryl, alkyl esters, thioesters, phosphoesters, ortho esters, imidates, mixed anhydrides, amides, thioamine and disulphides.

22. (previously amended) A compound according to claim 21, wherein C_b is absent and the reactive group is bonded directly to the O_1 amino acid residue in the affinity group.

23. (original) A compound according to claim 22, wherein the reactive group is bonded to the O_1 amino acid residue by an amide linkage.

24. (previously amended) A compound according to claim 21, wherein the reactive group has the formula $-X-R_1-C(O)-$, wherein R_1 comprises a substituted or unsubstituted aromatic group and X is selected from the group consisting of S, O and N.

25. (original) A compound according to claim 24, wherein X is bonded directly to an aromatic carbon atom in R_1.

26. (original) A compound according to claim 24, wherein R_1 is unsubstituted phenyl.

27. (previously amended) A compound according to claim 26, wherein -X- and -C(O)- are bonded to the phenyl in a para configuration.

28. (previously amended) A compound according to claim 24, wherein R_1 is phenyl substituted with one or more groups selected from the group consisting of a halogen, NO_2, SO_2NH_2, SO_2NHF, CF_3, CCl_3, CBr_3, $C\equiv N$, SO_3H, CO_2H, CHO, OH, $NHCOCH_3$, OCH_3, $CH_3$and CH_2CH_3.

29. (original) A compound according to claim 24, wherein the reactive moiety is bonded directly to the O_1 residue via the carboxyl carbon.

30. (previously amended) A compound according to claim 21 wherein C_b is present.

31. (previously amended) A compound according to claim 28, wherein C_b is bonded to the reactive group via an ester, thioester, amide, sulfonate ester or sulfonamide linkage.

32. (previously amended) A compound according to claim 30, wherein C_b is bonded to the O_1 amino acid residue in the affinity group via an ester, thioester, amide, sulfonamide, urea, thiourea or carbamate linkage.

33. (previously amended) A compound according to claim 30, wherein C_b comprises a backbone chain of between about 1 and about 25 atoms.

34. (previously amended) A compound according to claim 33, wherein C_b comprises a backbone chain of between about 2 and about 16 carbon atoms.

35. (previously amended) A compound according to claim 30, wherein C_b comprises an unsaturated carbon atom backbone chain of between about 1 and about 25 atoms.

Claims 36-39 (previously cancelled)

40. (previously amended) A compound according to claim 58 wherein C_a is present.

41. (previously amended) A compound according to claim 40, wherein C_a is bonded to E by an ester, thioester, amide, sulfonate ester or sulfonamide linkage.

42. (previously amended) A compound according to claim 40, wherein C_a is bonded to the reactive group by an ester, thioester, amide or sulfonate ester linkage.

43. (previously amended) A compound according to claim 40, wherein C_a comprises a backbone chain of between about 1 and about 25 atoms.

44. (previously amended) A compound according to claim 43, wherein C_a comprises a backbone chain of between about 2 and about 16 carbon atoms.

45. (previously amended) A compound according to claim 40, wherein C_a comprises an unsaturated carbon atom backbone chain of between about 1 and about 25 atoms.

46. (previously amended) A compound according to claim 1, wherein the diagnostic agent comprises biotin.

47. (previously amended) A compound according to claim 46, wherein biotin is bonded directly to the reactive group by an ester, thioester or amide linkage.

48. (previously amended) A compound according to claim 46, wherein the reactive group has the formula –X-Ph-C(O)-, and wherein X is oxygen, sulfur or nitrogen.

49. (previously amended) A compound according to claim 48, wherein the –X- and –C(O)- on the phenyl group are bonded in a para configuration.

50. (previously amended) A compound according to claim 47 wherein C_a is present.

51. (previously amended) A compound according to claim 50, wherein C_a is bonded to the biotin group by an amide linkage.

52. (previously amended) A compound according to claim 50, wherein C_a is $-NH-(CH_2)_n-C(O)-$, wherein n is an integer between 1 and 25.

53. (previously amended) A compound according to claim 52, wherein C_a is $-NH-(CH_2)_5-C(O)-$.

54. (previously amended) A compound according to claim 52, wherein C_a is $-NH-CH_2-C(O)-$.

55. (original) A compound selected from the group consisting of biotin-S-Ph-C(O)-F*l*YEE- NH_2, biotin-OPh-C(O)-F*l*YEE-NH_2, LC-biotin-S-Ph-C(O)-F*l*YEE-NH_2 , biotin-Gly-OPh-C(O)-F*l*YEE-NH_2, fluorescein-Gly-OPh-F*l*YEE-NH_2, LC-biotin-OPh-C(O)-F*l*YEE-NH_2, argatroban-AEA_3-βAla-Gly-OPh-C(O)-F*l*YEE-NH_2, and fluorescein-thiourea-AEA_3-Gly-OPh-C(O)-F*l*YEE-NH_2.

Claims 56-57 (previously cancelled).

58. (previously added) A compound as claimed in claim 1, wherein the target molecule comprises human serum albumin, and the affinity group A comprises a sequence of amino acid residues $-O_1-O_2-X_1-X_2-B-$ wherein the amino acid residues are independently selected from the group consisting of all twenty naturally occurring amino acids in either L or D configuration.

59. (New) A compound as claimed in claim 1, wherein E is Argatroban, C_a is AEA_3-βAla-Gly, R is -O-Ph-C(O)-, C_b is absent, and A is FlYEE-NH_2.